

WHAT IS CLAIMED IS:

1. A rotary blood pump for use in a heart assist device or like device, said pump having an impeller suspended in use within a pump housing by hydrodynamic thrust forces generated by relative movement of said impeller with respect to and within said pump housing; and wherein at least one of said impeller or said housing includes at least a first deformed surface lying on at least part of a first face which, in use, moves relative to respective facing surfaces on the other of said impeller or said housing thereby to form a relatively moving surface pair which generates relative hydrodynamic thrust between said impeller and said housing which includes everywhere a localized thrust component substantially and everywhere normal to the plane of said first deformed surface.